P2292.D1

09/587,049

Amendment D

## AMENDMENTS TO CLAIMS:

The listing of claims will replace all prior versions, and listings, of claims in the application:

## **LISTING OF CLAIMS**:

- 1-7. (Cancelled)
- 8. (Previously Amended) A device for controlling a physiological state, comprising:
- a measuring means for measuring an indicator of a physiological state related to arousal or sedation in a patient and a blood pulse waveform in the patient;
  - an administering means for administering a drug to the patient;
- a recording means for recording blood pulse waveforms corresponding to a physiological state in which drug administration is necessary; and
- a drug administration control means for comparing the blood pulse waveform measured by the measuring means and the blood pulse waveforms stored in the recording means, and for issuing a command to carry out administration of a drug based on the result of the comparison.
- 9. (Previously Amended) A device for controlling a physiological state, comprising:
- a measuring means for measuring an indicator of a physiological state related to arousal or sedation in a patient;
  - an administering means for administering a drug to the patient;
- a drug administration control means for issuing a command to the administering means for drug administration when the indicator of the physiological state satisfies specific conditions; and
- a means for detecting the output of a drug administration command, for determining from the point of this detection whether or not the indicator of physiological state has reached a state which does not satisfy the specified conditions, and for providing notification when the indicator of the physiological state has reached a state which does not satisfy the specified conditions.

P2292.D1 09/587,049 Amendment D

- 10. (Previously Amended) A device for controlling a physiological state according to claim 9, wherein the administering means comprises an infuser of the drug.
- 11. (Previously Amended) A device for controlling a physiological state, comprising:
- a measuring means for measuring an indicator of a physiological state related to arousal or sedation in a patient;
  - an administering means for administering a drug to the patient;
- a blood pulse detector for detecting a blood pulse cycle of blood sent from the patient's heart; and
- a drug administration control means for issuing a command to the administering means for drug administration when the indicator of the physiological state satisfies specific conditions,

wherein the drug administration control means issues a command to administer a drug to the administering means during the time interval from one blood pulse beat to the next blood pulse beat in synchronization with the blood pulse cycle.

- 12. (Original) A device for controlling a physiological state according to claim 11, wherein the administering means comprises an infuser of the drug.
- 13. (Currently Amended) A device for controlling a physiological state, comprising:
  - a measuring means for measuring an indicator of a physiological state;
- a recording means for storing the indicator measured, up until a current point in time;
- a control means for determining in advance a time when a drug is to be administered based on a rhythm of at least one of a daily, monthly and annual cycle calculated by use of the indicator circulatory indicators measured by the measuring means over a specified period of time specific number of days in the past, and for outputting a drug emission command at the determined time; and
- an administering means for administering the drug in accordance with the drug emission command.

P2292,D1 09/587,049 Amendment D

- 14. (Original) A device for controlling a physiological state according to claim 13, wherein the administering means comprises an infuser of the drug.
- 15. (Previously Amended) A device for controlling a physiological state, comprising:
  - a measuring means for measuring an indicator of a physiological state;
- a recording means for storing the indicator measured, up until a current point in time;
- a control means for selecting a time period in which the indicator is changing according to a specified trend, and for outputting a command to administer a drug during the time period; and
- an administering means for administering the drug in accordance with the command; and
- wherein the control means selects a time period in which the indicator is changing according to a specified trend, and outputs a command to administer a drug during the time period.
- 16. (Currently Amended) A device for controlling a physiological state, comprising:
  - a measuring means for measuring an indicator of a physiological state;
- a recording means for storing the indicator measured, up until a current point in time;
- a control means for outputting a drug emission command at a time determined in advance based on a current indicator of the physiological state and on a rhythm of at least one of a daily, monthly and annual cycle calculated in advance by use of the indicator circulatory indicators measured by the measuring means over a specified period of time specific number of days in the past; and
- an administering means for administering a drug in accordance with the drug emission command.
- 17. (Original) A device for controlling a physiological state according to claim 16, wherein the administering means comprises an infuser of the drug.

P2292.D1 09/587.049 Amendment D

- 18. (Previously Amended) A device for controlling a physiological state, comprising:
  - a measuring means for measuring an indicator of a physiological state;
- a recording means for storing the indicator measured, up until a current point in time;
- a control means for selecting a time period in which the indicator is changing according to a specified trend, and for outputting a command to administer a drug when the trend of the change differs from a trend demonstrated by the indicator during a past time period; and

an administering means for administering a drug in accordance with the command; and

wherein the control means selects a time period in which the indicator is changing according to a specified trend, and outputs a command to administer a drug when the trend of the change differs from a trend demonstrated by the indicator during a past time period.

- 19. (Original) A device for controlling a physiological state according to claim 16, wherein the control means selects a specified time period, and outputs a command to administer a drug when the indicator during the specified time period deviates a fixed amount above a moving average obtained in the past for the indicator.
- 20. (Previously Amended) A device for controlling a physiological state, comprising:
  - a measuring means for measuring an indicator of a physiological state;
- a recording means for storing the indicator measured, up until a current point in time;
- a control means for determining when a drug is to be administered based on a rhythm of variation displayed by the indicator over a specified period of time, and for outputting a drug emission command at a determined time;

an administering means for administering the drug in accordance with the drug emission command; and P2292.D1 09/587,049 Amendment D

- a means for detecting an output of the drug emission command, determining from the point of this detection whether or not the indicator of the physiological state indicates a first state which does not require emission of a drug, and providing notification when the indicator of the physiological state has reached the first state.
- 21. (Original) A device for controlling a physiological state according to claims 13 or 16, further comprising a first notification means for obtaining an amount of drug administered, and providing notification when the summed value of the administered amount reaches a specified amount.
- 22. (Original) A device for controlling a physiological state according to claim 21, comprising a second notification means for monitoring whether or not the emission of the drug is being carried out normally, and providing notification when an anomaly is present.
- 23. (Original) A device for controlling a physiological state according to claim 22, the device being portable, and comprising a battery and operating based on voltage supplied from the battery, and comprising an electricity supply control means intermittently supplying the voltage output from the battery to elements in the device.
- 24. (Original) A device for controlling a physiological state according to claim 23, further comprising a third notification means for providing notification when the voltage output from the battery falls below a specified voltage.
- 25. (Original) A device for controlling a physiological state according to claims 13 or 16, further comprising a blood pulse detection means for detecting in a body a blood pulse cycle blood output from a heart, wherein the control means issues a command to administer a drug during a time interval from one blood pulse beat to a next blood pulse beat in synchronization with the blood pulse cycle.
- 26. (Withdrawn) A device for controlling a physiological state, comprising:

  a measuring means for measuring an indicator of a physiological state;

Customer No. 20178
Amendment D

P2292.D1

09/587,049

ERD IPD

Amendment D

- a control means for determining a user's doze state by comparing the indicator of the physiological state with a predetermined standard value, and outputting a warning indicator when a doze state is detected; and
- a notifying means for warning the user based on the warning indicator output from the control means.
- 27. (Withdrawn) A device for controlling a physiological state, comprising:
  - a measuring means for measuring an indicator of a physiological state;
- a recording means for storing the indicator measured over a specified period of time;
- a calculating means for reading out indicators of the physiological state over a specified period of prior time from the recording means, and calculating the moving average of the indicators;
- a control means for determining the user's doze state by comparing the moving average of the indicators with a predetermined standard value, and outputting a warning indicator when a doze state is detected; and
- a notifying means for warning the user based on the warning indicator output from the control means.
- 28. (Withdrawn) A device for controlling a physiological state according to claims 26 or 27, further comprising:
- a transfer means for transferring to a vehicle, operated by the user, braking control information for controlling a braking action of the vehicle; and
- a braking control means for braking the vehicle in response to the braking control information transferred by the transfer means when the control means has detected a doze state.
- 29. (Withdrawn) A device for controlling a physiological state according to claims 26 or 27, further comprising an administering means for administering a drug with a stimulating effect in response to said warning indicator output from the control means.
- 30. (Withdrawn) A device for controlling a physiological state according to claims 26 or 27, further comprising a means for calculating a level of the user's

P2292.D1 09/587,049 Amendment D

alertness from a comparison between the indicator and a standard value, and carrying out notification that the level of alertness is high when the level of alertness exceeds a specified value.

## 31-38. (Cancelled)

- 39. (Original) A device for controlling a physiological state according to claim 9, wherein the administering means comprises an emission of the drug.
- 40. (Original) A device for controlling a physiological state according to claim
- 11, wherein the administering means comprises an emission of the drug.
- 41. (Original) A device for controlling a physiological state according to claim
- 13, wherein the administering means comprises an emission of the drug.
- 42. (Original) A device for controlling a physiological state according to claim 16, wherein the administering means comprises an emission of the drug.
- 43. (Original) A device for controlling a physiological state, comprising:
  - a measuring means for measuring an indicator of a physiological state;
- a recording means for storing the indicator measured, up until a current point in time;
- a control means for outputting a drug emission command based on a current indicator of the physiological state and on a rhythm of variation in the indicator over a specified period of time;
- an administering means for administering a drug in accordance with the drug emission command; and
- a means for detecting an output of the drug emission command, determining from the point of this detection whether or not the indicator of the physiological state indicates a first state which does not require emission of a drug, and providing notification when the indicator of the physiological state has reached the first state.